

IN THE CLAIMS

1-186. (Cancelled)

187. (Currently amended) A method of transferring a data-carrying light beam, comprising:

~~transmit~~receiving ~~at~~ the data-carrying light beam through the atmosphere;

directing ~~a received beam including~~ at least a portion of the ~~transmitted~~received beam into at least one fiber; and

changing the amplitude of the at least a portion of the received beam ~~directed into the at least one fiber~~, by passing the beam through an variable amplification or attenuation, using optical amplitude modifier apparatus having a variable amplitude change factor, wherein the amplitude modifier attenuates at least some of the portion of the received beam ~~amplitude changes comprise attenuations~~; and

retransmitting the beam passed through the amplitude modifier, without converting the beam into electrical signals and regenerating a beam from the electrical signals.

188. (Currently amended) A method according to claim 187, wherein changing the amplitude comprises changing by a factor determined responsive to an extent to which the received beam was affected by the atmosphere, so as to substantially cancel the affect of the atmosphere on the beam.

189. (Previously presented) A method according to claim 188, wherein changing the amplitude comprises changing by a factor determined responsive to an extent to which the received beam was affected by atmospheric turbulence.

190. (Previously presented) A method according to claim 187, wherein changing the amplitude comprises changing by a factor determined responsive to an average power level of the received beam.

191. (Previously amended) A method according to claim 187, comprising continuously determining a momentary power of the received beam and wherein changing the amplitude of the received beam comprises changing the amplitude by a factor determined responsive to the determined momentary power of the received beam.

192. (Previously presented) A method according to claim 191, wherein determining the power of the received beam comprises passing a portion of the received beam to a light detector.
193. (Previously presented) A method according to claim 192, wherein passing the portion of the received beam to the light detector comprises passing a portion of the received beam after its amplitude is variably changed.
194. (Currently amended) A method according to claim 187, wherein changing the amplitude comprises providing, at an output of the optical ~~apparatus~~amplitude modifier, a light beam with a substantially constant power.
195. (Currently amended) A method according to claim 187, wherein a rate of variation of the ~~amplification or attenuation~~amplitude change factor of the optical ~~amplitude modifier~~amplitude modifier apparatus ~~which performs the amplitude change~~ is at least 1 kHz.
196. (Currently amended) A method according to claim 187, wherein a rate of variation of the ~~amplitude change factor~~amplification or attenuation of the optical ~~amplitude modifier~~amplitude modifier apparatus ~~which performs the change~~ is at least 50 Hz.
197. (Previously presented) A method according to claim 187, wherein changing the amplitude comprises amplifying or attenuating by an optical amplifier.
198. (Previously presented) A method according to claim 195, wherein changing the amplitude comprises attenuating by an optical attenuator.
199. (Currently amended) A method according to claim 187, comprising additionally passing the at least a portion of the received beam through an additional optical apparatus which amplifies the received beam.
200. (Previously presented) A method according to claim 199, wherein the additional optical apparatus changes the amplitude of the received beam by a constant gain.

201. (Currently amended) A method according to claim 187, wherein ~~receiving~~transmitting the light beam through the atmosphere comprises ~~receiving from an~~transmitting outdoors transmission path.
202. (Currently amended) A method according to claim 187, wherein ~~receiving~~transmitting the light beam through the atmosphere comprises receiving a light beam that traveled ~~transmitting over a distance of at least 100 meters through the atmosphere~~.
203. (Currently amended) A method according to claim 202, wherein ~~receiving~~transmitting the light beam through the atmosphere comprises receiving a light beam that traveled ~~transmitting over a distance of at least 1000 meters through the atmosphere~~.
204. (Currently amended) A method according to claim 187, wherein changing the amplitude by ~~optical apparatus~~ comprises changing by optical apparatus having a variable amplification or attenuation with a dynamic range of at least about 30dB.
205. (Previously presented) A method according to claim 187, wherein the data-carrying light beam carries data in a plurality of distinct wavelengths.
206. (Currently amended) A method according to claim 187, wherein directing at least a portion of the received beam into at least one fiber comprises directing the received beam into a single mode fiber.
207. (Currently amended) A method according to claim 187, wherein the amplitude modifier~~optical apparatus~~ has a high ~~amplification or attenuation~~amplitude variation rate, suitable for automatic gain control (AGC) of the beam received from the atmosphere.
208. (Currently amended) A method according to claim 207, wherein the amplitude change factor ~~amplification or attenuation of the amplitude modifier~~~~optical apparatus~~ has a variation rate higher than 1 kHz.
209. (Currently amended) A method according to claim 187, wherein the amplitude modifier~~optical~~

| apparatus is effectively operative over a bandwidth of at least 40 nm.

210-211. (Cancelled)

| 212. (Currently amended) A method according to claim 25310, wherein the data-carrying light beam carries data in a plurality of distinct wavelengths.

| 213. (Currently amended) A method according to claim 205212, wherein the optical amplitude modifier provides for each distinct wavelength a beam with a substantially constant average amplitude.

214. (Cancelled)

| 215. (Currently amended) A method according to claim 195210, wherein ~~passing the beam through an optical amplitude modifier comprises providing, at an output of the optical amplitude modifier,~~ provides a light beam with a substantially constant power.

216-217. (Cancelled)

| 218. (Currently amended) A method according to claim 204217, wherein the change factor ~~amplification or attenuation of the optical amplitude modifier~~ apparatus has a variation rate higher than 1 kHz.

| 219. (Currently amended) A method according to claim 25417, wherein the data-carrying light beam carries data in a plurality of distinct wavelengths.

| 220. (Currently amended) A method according to claim 25317, wherein the optical amplitude modifier apparatus has a variable amplitude change factor ~~amplification or attenuation~~ with a dynamic range of at least about 30dB.

| 221. (Currently amended) A method according to claim 25317, wherein changing the amplitude of the beam comprises providing, by the optical amplitude modifier apparatus, a light beam with a

substantially constant power.

222. (Cancelled)

223. (Currently amended) A method according to claim ~~253~~⁴⁷, wherein the optical amplitude modifier~~apparatus~~ is effectively operative over a bandwidth of at least 40 nm.

224-226. (Cancelled)

227. (Currently amended) A transceiver according to claim ~~244~~²⁶, wherein the optical amplitude modifier provides a light beam in which at least one of the wavelengths has a substantially constant power.

228-230. (Cancelled)

231. (Currently amended) A transceiver according to claim ~~240~~²⁴, comprising an optical transmitter adapted to re-transmit light beams processed by the optical amplitude modifier.

232. (Previously presented) A transceiver according to claim 231, wherein the optical transmitter is adapted to transmit the processed light beams to the atmosphere.

233-236. (Cancelled)

237. (Currently amended) A method according to claim ~~254~~³³, wherein the received beam comprises a plurality of data carrying wavelengths.

238. (Currently amended) A method according to claim ~~187~~²³³, wherein passing the beam through an optical amplitude modifier comprises passing the beam through a saturated optical amplifier.

239. (Previously presented) A method according to claim 238, wherein passing the beam through a saturated optical amplifier comprises passing the received beam through an erbium doped fiber amplifier (EDFA).

240. (Currently amended) An optical wireless transceiver, comprising:
- at least one fiber adapted to receive a data-carrying light beam from the atmosphere;
 - an optical amplitude modifier adapted to change the amplitude of the received light beam, by a variable amplification or attenuation, wherein at least some of the amplitude changes comprise attenuations; and
 - a transmitter adapted to transmit beams from the optical amplitude modifier, without regeneration of the beams.
241. (Previously presented) A transceiver according to claim 240, wherein the optical amplitude modifier is adapted to process light beams carrying data in a plurality of distinct wavelengths.
242. (Previously presented) A transceiver according to claim 241, wherein the optical amplitude modifier provides a light beam in which at least one of the wavelengths has a substantially constant power.
243. (Previously presented) A transceiver according to claim 242, wherein the optical amplitude modifier provides a light beam in which each of the wavelengths has a substantially constant power.
244. (Previously presented) A transceiver according to claim 240, wherein the optical amplitude modifier comprises an optical attenuator.
245. (Previously presented) A transceiver according to claim 240, wherein the optical amplitude modifier has an effective bandwidth of at least 40 nm.
246. (Previously presented) A transceiver according to claim 240, wherein the optical amplitude modifier has a high amplification or attenuation variation rate.
247. (New) A method according to claim 187, wherein retransmitting the light beam comprises transmitting over a distance of at least 100 meters.
248. (New) A method according to claim 187, wherein changing the amplitude of the at least a

portion of the received beam comprises passing the beam through an optical amplifier and an optical attenuator arranged in series.

249. (New) A method according to claim 248, wherein the optical amplifier has an amplification level which changes at a slower rate than the attenuation level of the attenuator.

250. (New) A method according to claim 248, wherein the optical amplifier has a substantially constant amplification.

251. (New) A method according to claim 250, wherein the attenuator has an attenuation level which changes at a rate sufficient for automatic gain control.

252. (New) A method according to claim 248, wherein directing the received beam into at least one fiber comprises directing into a single mode fiber.

253. (New) A method of transferring a data-carrying light beam, comprising:
receiving a data-carrying light beam through the atmosphere;
directing at least a portion of the received beam into at least one single mode fiber; and
changing the amplitude of the at least a portion of the received beam, by passing the beam through an optical amplitude modifier having a variable amplitude change factor, wherein the amplitude modifier attenuates at least some of the portion of the received beam.

254. (New) A method of transferring a data-carrying light beam, comprising:
receiving a data-carrying light beam through the atmosphere;
directing at least a portion of the received beam into at least one fiber; and
passing the received beam directed into the at least one fiber, through an optical amplifier, which amplifies the beam, and an optical attenuator, which attenuates the beam, arranged in series.

255. (New) A method according to claim 254, wherein passing the received beam through an amplifier and an attenuator comprises passing first through the amplifier and then through the attenuator.

256. (New) A method according to claim 254, wherein the optical amplifier has an amplification level which changes at a slower rate than the attenuation level of the attenuator.

257. (New) A method according to claim 254, wherein the optical amplifier has a substantially constant amplification.

258. (New) A method according to claim 257, wherein the attenuator has an attenuation level which changes at a rate sufficient for automatic gain control.